

REMARKS

The application is believed to be in condition for allowance for the reasons set forth below.

Claims 1-20 are pending in the application.

Claims 1-20 were rejected under 35 USC §103(a) as being unpatentable over TERADA et al. JP 10-231441 in view of BUESS et al. 6,362,239. That rejection is respectfully traversed.

The Official Action recognizes that TERADA does not disclose a complex oxide of black pigment which contains cobalt, copper and manganese. BUESS is offered for this feature with the Official Action concluding that it would have been obvious to modify TERADA in view of BUESS to increase the number of available complex particles for use. The Official Action further concludes that it would have been obvious to optimize the properties because such optimal value is a result-effective variable involving only routine skill in the art.

However, this position is believed to be clearly untenable for at least the following reasons.

First, the reference to BUESS is outside applicants' field of endeavor and would not logically have commended itself to an inventor's attention in considering problems related to complex black oxide particles.

As set forth in paragraphs [0001] and [0002] of the present invention, black oxide particles are used in producing black coating materials, ink, toner, rubber, plastic and the like

required to have excellent performances and blackness, hue, tinting strength, or hiding power as well as low cost.

BUESS discloses a catalyst comprising cobalt, copper and manganese to manufacture organic materials such as alcohols and olefins which is carried out in the presence of the catalytic composition. Such catalyst material is unrelated to the recited black oxide particles.

The Federal Circuit has held that "in order to rely on a reference as a basis for rejection of an applicant's invention, the reference must either be in the field of applicant's endeavor, or if not, then be reasonably pertinent to the particular problem with which the inventor was concerned." *In re Oetiker*, 977 F.2d 1443, 1446, 24 USPQ2d 1443, 1445 (Fed. Cir. 1992).

"A reference is reasonably pertinent if, even though it may be in a different field from that of the inventor's endeavor, it is one which, because of the matter with which it deals logically would have commended itself to an inventor's attention in considering his problem." *Wang Laboratories Inc. v. Toshiba Corp.*, 993 F.2d 858, 26 USPQ2d 1767 (Fed. Cir. 1993).

As set forth above, BUESS is related to a catalyst for alcohols and olefins. Such catalyst would not logically have commended itself to the inventor's attention in considering his problem of increasing blackness. Accordingly, one having

ordinary skill in the art would not have been motivated to use BUESS as a reference to reject the present claims.

Second, even if one were to consider BUESS in the first instance, the recited ratio is not a result-effective variable.

The Board of Customs and Patent Appeals has held that a particular parameter must first be recognized as a result-effective variable, i.e., a variable that achieves a recognized result, before the determination of the optimum or workable ranges of said variable might be characterized as routine experimentation. *In re Antonie*, 559 F.2d 618, 195 USPQ 6 (CCPA 1996).

The ranges of Co:Cu:Mn in BUESS are outside the claimed Cu/Co ratio and Mn/Co ratio. BUESS does not teach or suggest that the molar ratios contribute to an improvement in a performance of black pigment, especially dispersibility and blackness of a pigment. That is, the molar ratios are not based on a recognized result that one of ordinary skill in the art could optimize based on the teachings of BUESS and routine experimentation.

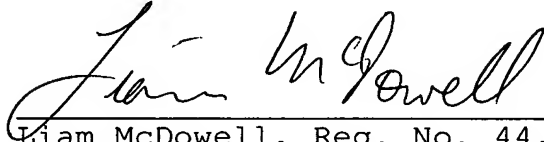
In view of the above, it is believed to be apparent that the proposed combination of references is not only improper, but also fails to meet the present claims. Reconsideration and withdrawal of the rejection are respectfully requested.

The Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any

overpayment to Deposit Account No. 25-0120 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17.

Respectfully submitted,

YOUNG & THOMPSON

A handwritten signature in cursive script, reading "Liam McDowell", is written over a horizontal line.

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